**SANDIA NATIONAL LABORATORIES
CIVILIAN RADIOACTIVE WASTE MANAGEMENT
QUALITY ASSURANCE IMPLEMENTING PROCEDURE (QAIP)**

QAIP 1-2

ORGANIZATION AND QUALITY ASSURANCE PROGRAM

Revision 15

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SNL CRWM Laboratory Lead

REVISION HISTORY

REVISION	REVISION DESCRIPTION

00   This is the initial issue of the procedure.

01   This revision incorporated style and format of QAIP 5-1, rev.01. Incorporate changes in position titles.

02   This revision changed titles and organization chart to reflect recent SNL organization changes.

03   This revision included changes to titles and organizations to reflect 6300 Center changes. Changes are shown by revision bars.

04   This revision included deleting Org 6304, incorporating ICN 01, change department 6318 to 6352.

05   This revision included adding changes to QARD requirements, adding reference section and removing reference to QAPD.

06   This revision included changes to organizational title changes and adding QARD requirements.

07   This revision included adding department 6314 to organization.

08   This revision included adding Burnup Credit in the scope of QAIP 1-2 where it applied.

09   This revision included deleting any reference to audits. This revision occurred because SNL no longer is responsible for performing QA audits. This function is now performed by OCRWM, Office of Quality Assurance.

10   This was a total revision. This revision was done to incorporate changes to the QARD, and incorporate QAIP 5-1, rev. 5.

11   This revision eliminated the Project Support (6752) and placed the functions previously in that department under the Laboratory Lead.

12   Full revision to address new management policy, respond to DR YM-96-D004, and address the OQA transition. This revision incorporates the QA dispute resolution process, which was formerly the subject of QAIP 1-4.

13   Removes reference to unused Individual Work Authorization (IWA) process, modifies description of OWAST work, and makes other minor corrections.

14   Revised to transtion to Process Validation and Reengineering procedure changes.

15   Editorial changes to address BSC transition including minor editorial changes and organizational clarifications.

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1.0 PURPOSE AND SCOPE

This procedure describes the organization, requirements, interfaces, and responsibilities of the Sandia National Laboratories (SNL) Civilian Radioactive Waste Management (CRWM) effort under the Office of Civilian Radioactive Waste Management (OCRWM) Quality Assurance (QA) program. This procedure applies to all SNL work activities in support of the SNL CRWM Program for the Yucca Mountain Site Characterization Project.

The organizational positions within SNL for which responsibilities are described include the **SNL Lab Lead** and **Task Managers** assigned responsibility for work activities in support of the CRWM effort at SNL. The applicable responsibilities of functional positions are described in SNL CRWM procedures. Project requirements applicable to delegation of work/responsibility and quality assurance are included.

A key element of the organizational QA requirements is the requirement for a structured system of implementing documents which translate requirements of the Quality Assurance Requirements and Description (QARD) document into work processes for SNL CRWM work subject to quality assurance program controls. This procedure is the first in the top down implementation document structure.

Implementing documents are prepared and approved under QAIP 5-1, "Quality Assurance Implementing Procedures," and QAIP 20-1, "Technical Procedures."

2.0 DEFINITIONS

The terms used in this procedure are consistent with the definitions provided in other SNL CRWM quality assurance documents.

M&O Quality Assurance Representative - The individual(s) assigned by the BSC QA Manager who is responsibe for the quality assurance function.

SNL Lab Lead - The SNL Manager assigned overall management responsibility for work activities in support of the SNL CRWM Program.

Task Manager - An SNL Department Manager or staff member who has been charged by the SNL Lab Lead with responsibility for a major functional area in support of the SNL CRWM Program.

3.0 ORGANIZATIONAL STRUCTURE
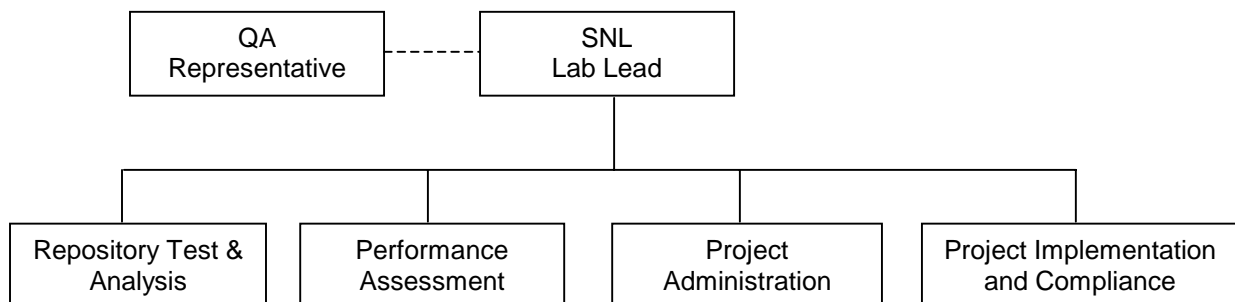
3.1 Administrative Organization:

The SNL administrative management structure has four levels: President, Division Vice President, Center Director, and Department Manager. Project Management responsibility for SNL CRWM activities is assigned to the **SNL Lab Lead** (Department Manager level). The **SNL Lab Lead** has a direct reporting relationship to the Center Director for the Nuclear Waste Management Programs Center. The Center Director in turn reports to the Energy, Information and Infrastructure Surety Division Vice President, who reports to the President of Sandia Corporation.

3.2 Functional Organization:

CRWM Functions
The **SNL Lab Lead** has the role of management and integration of OCRWM activities at Sandia and is therefore responsible for establishing, implementing, and ensuring compliance with the requirements of the QARD through the Bechtel SAIC Company, LLC (BSC) Quality Assurance Program.

Functionally, SNL CRWM activities are organized into four matrix areas, each under the responsibility of a **Manager** assigned by the **SNL Lab Lead**.

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│      QA      │--------│     SNL      │
│Representative│        │   Lab Lead   │
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│Repository Test &││ Performance  ││   Project   ││Project Implementation│
│   Analysis    ││  Assessment  ││Administration││    and Compliance    │
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Task Managers may delegate responsibilities and authorities for attaining quality objectives and adhering to the SNL CRWM Quality Assurance Program to other individuals or organizations, but responsibility for achieving project objectives is retained by the **Task Managers** and ultimately the **SNL Lab Lead**. **Task Managers** have responsibility for: managing the activity within their scope of responsibility; planning; assigning personnel; assigning training; responding in a timely manner to quality assurance deficiencies; monitoring cost and schedule performance; providing required status reports; ensuring the submittal of project records; ensuring compliance with Environment, Safety, and Health (ES&H), and ensuring compliance with other BSC requirements.

The four functional areas and the responsibilities assigned to each **Task Manager** are as follows:

Repository Test & Analysis: This **Task Manager** is responsible for activities in the areas of testing, laboratory mechanical property measurement, systems engineering, support to sealing studies, and seismic analysis. This **Task Manager** is responsible for SNL at Yucca Mountain and for facilitating SNL interactions with BSC, with particular emphasis on scientific program activities.

Performance Assessment: This **Task Manager** is responsible for directing activities associated with repository post-closure performance assessment. The area's responsibilities include developing and applying methods for calculating radionuclide releases to the environment. Activities in this functional area are: site performance assessment, total system performance assessment, abstraction, regulatory interface, and scenario development. The **Task Manager** is responsible for facilitating SNL interactions with BSC, with particular emphasis on performance assessment and regulatory activities.

Project Administration: This **Task Manager** is responsible for project control (e.g., planning, scheduling, budget tracking and analysis, cost control, and status reporting), procurement coordination, property management, and related administrative support activities.

Project Implementation and Compliance: This **Task Manager** has responsibility for support activities including records management, training, document control, technical reports publication, technical data processing, and QA implementation support (Engineering Assurance).

Other Functions:

Facilities Support
Computational systems support and other support activities, such as facilities, motor vehicle support, and ES&H assistance for Albuquerque personnel are matrixed from the appropriate Sandia Organization. On-site support for Las Vegas personnel is provided through the CRWMS BSC.

Quality Assurance
The **Director of OQA** is responsible for OCRWM quality assurance functions. The responsibilities and reporting hierarchy of the OCRWM OQA are identified in the OCRWM organization procedure.

Wherever the term QA Manager, QA staff, QA reviewer or similar term is used in SNL implementing documents, it shall be deemed to mean BSC QA. SNL implementing documents shall incorporate BSC QA at the next revision of the document.

4.0 QUALITY ASSURANCE IMPLEMENTATION

4.1 General

The OCRWM Quality Assurance program provides for both the achievement of quality and the verification of that achievement. **Personnel** authorized to work on CRWM activities have total responsibility for achieving and maintaining quality, which shall be verified by persons or organizations not directly responsible for performing the work.

The Quality Assurance function is provided by the Office of Quality Assurance, which has the responsibility to verify the achievement of quality through the conduct of overview activities such as audits, surveillances, and reviews. The **BSC QA Representative** has access to work areas and the organizational freedom to: identify quality problems; verify implementation of solutions; and interpret QA Program requirements.

The **SNL Lab Lead** has delegated the work of establishing and implementing the BSC Quality Assurance Program to line management; however, the **SNL Lab Lead** retains responsibility for achieving CRWM quality objectives. This responsibility includes ensuring that QARD requirements are incorporated into implementing documents and performing reviews of QARD revisions to assess the need for changes to procedures as appropriate.

4.2 Implementing Documents

A structured series of implementing documents has been established to implement QARD requirements for SNL CRWM activities. The implementing documents prepared and issued by SNL include a series of Quality Assurance Implementing Procedures (QAIPs) and more activity-specific Technical Procedures (TPs). Other program level implementing documents, prepared, approved, issued, and controlled by the responsible organization are adopted under the SNL CRWM QA program, either to directly implement specific QA requirements or at management direction.

Implementation of QARD requirements is through the BSC QA Program, which consists of several levels of implementing procedures. The QARD requirements are tracked in the QARD Matrix system described in QAIP 5-1. Personnel authorized to work on SNL CRWM activities determined subject to the BSC QA Program are required to comply with appropriate implementing documents.

4.3 Quality Assurance Dispute Resolution

Differences of opinion involving the interpretation and implementation of QA program requirements shall be brought to the attention of the appropriate management and, if not resolved, shall be elevated progressively to successively higher levels of management.

The **SNL Lab Lead** has the authority to resolve disputes between **SNL personnel** concerning quality assurance issues. If the dispute cannot be resolved within SNL, the SNL Lab Lead will bring the issue to the attention of the BSC QA Manager. If satisfactory resolution cannot be obtained at that level, the matter is then elevated to the BSC General Manager.

5.0 RECORDS

None.

6.0 REFERENCES

DOE/RW-0333P, "Quality Assurance Requirements and Description"
QAIP 5-1, "Quality Assurance Implementing Procedures"
QAIP 20-1, "Technical Procedures"